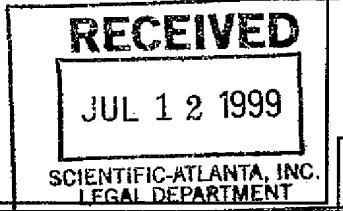


PATENT COOPERATION TREATY

From the
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

To: KELLY A. GARDNER
SCIENTIFIC-ATLANTA, INC.
INTELLECTUAL PROPERTY DEPARTMENT
ONE TECHNOLOGY PARKWAY SOUTH
NORCROSS, GA 30092



PCT

WRITTEN OPINION

(PCT Rule 66)

08 JUL 1999

| | | |
|--|--|--|
| Applicant's or agent's file reference F-3614-PC | REPLY DUE | Date of Mailing (day/month/year) 08 JUL 1999 |
| International application No. PCT/US98/16040 | International filing date (day/month/year) 31 JULY 1998 | Priority date (day/month/year) 31 JULY 1997 |
| International Patent Classification (IPC) or both national classification and IPC IPC(6): H04N 7/167; and US Cl.: 380/10, 20, 21, 23, 25, 49; | | |
| Applicant SCIENTIFIC-ATLANTA, INC. | | |

1. This written opinion is the first (first, etc.) drawn by this International Preliminary Examining Authority.
2. This opinion contains indications relating to the following items:
 - I Basis of the opinion
 - II Priority
 - III Non-establishment of opinion with regard to novelty, inventive step or industrial applicability
 - IV Lack of unity of invention
 - V Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
 - VI Certain documents cited
 - VII Certain defects in the international application
 - VIII Certain observations on the international application
3. The applicant is hereby invited to reply to this opinion.

When? See the time limit indicated above. ~~The applicant may, before the expiration of that time limit, request this Authority to grant an extension, see Rule 66.2(d).~~

How? By submitting a written reply, accompanied, where appropriate, by amendments, according to Rule 66.3. For the form and the language of the amendments, see Rules 66.8 and 66.9.

Also For an additional opportunity to submit amendments, see Rule 66.4. For the examiner's obligation to consider amendments and/or arguments, see Rule 66.4 bis. For an informal communication with the examiner, see Rule 66.6.

If no reply is filed, the international preliminary examination report will be established on the basis of this opinion.
4. The final date by which the international preliminary examination report must be established according to Rule 69.2 is: 30 NOVEMBER 1999.

| | |
|--|---|
| Name and mailing address of the IPEA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231 Facsimile No. (703) 305-3230 | Authorized officer PINCHUS M. LAUFER <i>James R. Matthews</i> Telephone No. (703) 306-4160 |
|--|---|

WRITTEN OPINION

International application No.

PCT/US98/16040

I. Basis of the opinion

1. This opinion has been drawn on the basis of (*Substitute sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this opinion as "originally filed"*):

the international application as originally filed.

the description, pages 1-78, as originally filed.
pages NONE, filed with the demand.
pages NONE, filed with the letter of _____

the claims, Nos. 1-12, as originally filed.
Nos. NONE, as amended under Article 19.
Nos. NONE, filed with the demand.
Nos. NONE, filed with the letter of _____

the drawings, sheets/fig 1-21, as originally filed.
sheets/fig NONE, filed with the demand.
sheets/fig NONE, filed with the letter of _____

2. The amendments have resulted in the cancellation of:

the description, pages NONE

the claims, Nos. NONE

the drawings, sheets/fig NONE

3. This opinion has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the **Supplemental Box** Additional observations below (Rule 70.2(c)).

4. Additional observations, if necessary:

NONE

WRITTEN OPINION

International application No.

PCT/US98/16040

V. Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**1. STATEMENT**

| | | |
|-------------------------------|--------------------|-----|
| Novelty (N) | Claims <u>NONE</u> | YES |
| | Claims <u>1-12</u> | NO |
| Inventive Step (IS) | Claims <u>NONE</u> | YES |
| | Claims <u>1-12</u> | NO |
| Industrial Applicability (IA) | Claims <u>1-12</u> | YES |
| | Claims <u>NONE</u> | NO |

2. CITATIONS AND EXPLANATIONS

Claims 1-7 lack novelty under PCT Article 33(2) as being anticipated by Rohatgi (EP 0752 786). Rohatgi teaches sending a message, the digitally signed hash of the message and a certificate from the headend to the set top which then recreates the hash and compares to determine both source authenticity and data integrity.

Claims 8-12 lack an inventive step under PCT Article 33(3) as being obvious over Rohatgi ('786) in view of Coutrot et al. Rohatgi does not specifically teach the use of the control word. Coutrot teaches (p. 464, top of right column)the ubiquity of control words in conditional access satellite systems, that they should be transmitted in encrypted form (p 464 bottom of right column) and their use as input to the Hash. In light of this teaching it would have been obvious to implement Rohatgi with the additional requirement of using the control word.

Claim 1-12 lack an inventive step under PCT Article 33(3) as being obvious over Moore ('527). Moore teaches (at the locations cited)an analogous system for a software reuse library. The only difference is that the context of Moore is not satellite or cable tv. It is well established that teachings regarding "software" encompass all forms of digital data. In this digital age, when television transmissions are digital, the application of Moore's scheme to a TV system using "headends" and "set-tops" is obvious.

----- NEW CITATIONS -----

US 5,343,527 (MOORE) 30 AUGUST 1991, see figures 4-7, column 8 line50 - column 9 line 21, and column 10 line 60 - column 13 line 35

WRITTEN OPINION

International application No.

PCT/US98/16040

VI. Certain documents cited**1. Certain published documents (Rule 70.10)**

| Application No. Patent No. | Publication Date (day/month/year) | Filing Date (day/month/year) | Priority date (valid claim) (day/month/year) |
|-------------------------------|--------------------------------------|---------------------------------|---|
| US, A 5,907,619 | 25 MAY 1999 | 20 DECEMBER 1996 | |
| US, A, 5,870,475 | 9 FEBRUARY 1999 | 19 JANUARY 1996 | |
| US, A, 5,870,474 | 9 FEBRUARY 1999 | 29 DECEMBER 1995 | 04 DECEMBER 1995 |

2. Non-written disclosures (Rule 70.9)

| Kind of non-written disclosure | Date of non-written disclosure (day/month/year) | Date of written disclosure referring to non-written disclosure (day/month/year) |
|--------------------------------|--|---|
| | | |

Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: Boxes I - VIII

Sheet 10

TIME LIMIT:

The time limit set for response to a Written Opinion may not be extended. 37 CFR 1.484(d). Any response received after the expiration of the time limit set in the Written Opinion will not be considered in preparing the International Preliminary Examination Report.